

STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:

Application for Certification
for the Humboldt Bay Repowering Project

Docket No. 06-AFC-7

**ENERGY COMMISSION STAFF'S COMMENTS ON THE PRESIDING
MEMBER'S PROPOSED DECISION AND SUPPLEMENTAL TESTIMONY IN
RESPONSE TO PACIFIC GAS AND ELECTRIC COMPANY'S BIORETENTION
AREA SUBMITTAL**

On August 18, 2008, the Committee presiding over the Humboldt Bay Repowering Project Application for Certification issued the Presiding Member's Proposed Decision and directed parties to file any comments by September 10, 2008. On August 13, 2008, the applicant submitted a proposal to modify the project to include a bioretention area and requested that the evidentiary record be reopened to allow additional testimony concerning this small project change. On August 20, 2008, the Committee granted applicant's motion, and staff hereby respectfully files comments on the PMPD and supplemental testimony concerning the bioretention area.

I. Comments on the PMPD

Facility Design

Page 50, footnote 4 – for clarification, staff recommends the footnote be modified as follows:

The Energy Commission is the CBO for energy facilities certified by the Commission. We may delegate CBO authority to local building officials or third party engineering consultants to carry out design review and construction inspections. When CBO duties are delegated to local authorities or third party

Proof of Service (Revised 7/24/08) filed with original.
Mailed from Sacramento on 9-9-08

consultants, the Commission requires a Memorandum of Understanding with the delegated CBO to assign the roles and responsibilities described in Conditions of Certification GEN-1 through GEN-8. (Ex. 200, p. 5.1-3.).

Air Quality

Page 102, final paragraph, first sentence - should be edited: "Shutdown of the existing HBPP Units 1 and 2 and MEPPs following commissioning of the new HBRP would provide emission reductions **that offset the new HBRP emissions credits.**"

Page 108, AIR QUALITY Table 7 - The asterisks in the table should either be deleted, or the original footnote to the table should be included to explain their presence, as follows: **"Note: * Basis of maximum lb/day is 24 hours of full load with three startups per day per engine (AQ-101 and AQ-134) and diesel mode limited to 142 engine-hours per day (AQ-104)."**

Page 110, pursuant to Staff and Applicant's joint stipulation filed on June 9, 2008, the title to Air Quality Table 8 should be changed to: "Summary of Emission Reductions Required by the NCUAQMD."

Page 120, second full paragraph, first sentence – for clarity, staff recommends the sentence be modified as follows: "The HBRP project would replace a less-efficient existing facility with **one that will result in** lower emissions of CO2/MWh and likely lower net emissions."

Public Health

Page 188, first full paragraph – in its analysis, staff erroneously referred to mean lower low water when describing the elevation of the terrain surrounding the HBPP. Such a term should not be used when describing approximate measurements and, having realized our original error, we recommend that this term be stricken from the statement as follows:

"The terrain in the vicinity of the project rises rapidly from Humboldt Bay on the north side to an elevation of approximately 69 feet mean lower low water (MLLW) at Buhne Point peninsula."

Page 190, last paragraph – while staff agrees that the assumptions used in modeling public health impacts are very conservative, we do not believe this necessarily makes them unrealistic. Therefore, staff recommends the follow changes to the discussion:

"Since these assumptions are **health protective and tend to overestimate** ~~unrealistic and greatly overstate~~ the potential impacts, if a project's impacts are below the significance threshold, the analysis ensures **that it is unlikely** that there **would** ~~will not~~ be a significant public health risk to any person at any location ~~under any circumstances~~."

Page 194, last full paragraph – the model showing less than 10 in a million cancer risk was calculated by applicant, not staff. Therefore, staff recommends the following change:

"The maximum cancer risk for emissions from the HBRP (calculated by **Applicant** ~~Staff~~) is less than 10 in one million at a location east of the facility boundary."

Biological Resources

Page 254, item 5 - the last word "plants" should be changed to "plans" to make clear that the condition prohibits adding pest plants to the landscaping plan, not that it requires removal of any existing pest plants that could be in the site's current landscaping.

Soil and Water Resources

Page 263, last paragraph – staff believes that further discussion of why the project is in conformance with the state water policy would be helpful in providing clarification on its application. If the Committee is amenable to this, staff recommends the following language be added at the end of the paragraph:

Condition of Certification SOIL & WATER-5 specifies that the Applicant is to use raw water from PG&E's well No. 2 during construction for all non-potable purposes including compaction and dust suppression, and during operation for all process needs. The proposed operational water use is consistent with state water conservation policies because it utilizes a close-loop air radiator system for cooling the reciprocating engine-generator units. The water used in the cooling system is continually recycled and is not used for evaporative cooling, avoiding a significant consumption of water (Exh. 200, p. 4.9-18 to 4.9-19).

Cultural Resources

Page 284, first full paragraph, last sentence – for clarity, staff recommends that Cul-11 also be identified as an agreed-to mitigation measure as follows: “To mitigate potentially significant impacts to as-yet-undiscovered significant archaeological resources, Staff has recommended, and Applicant has agreed to, the adoption and implementation of Conditions of Certification CUL-1 through CUL-7 and CUL-11.”

Page 285, last paragraph, second sentence – for clarification purposes, staff recommends the following addition: “To accomplish this, the conditions provide for cultural resources awareness training for construction workers, a cultural resources survey of any non-commercial soil borrow and disposal sites used by the project, the archaeological and Native American monitoring of ground-disturbing activities, the recovery of significant data from discovered archaeological deposits, the writing of a technical archaeological report on monitoring activities and results, and for the curation of recovered artifacts and other data.”

Geology and Paleontology

Page 303, 2nd full paragraph – replace “Discharge Coastal Faults” with “Discharge Canal Faults.”

Socioeconomics

Page 342, because impacts to fire protection services and public utilities are analyzed in other technical areas, not socioeconomics, staff recommends that reference to these issues be removed from the first sentence. Item 3 on page 347 should likewise be modified by striking “fire and.”

Page 343, in its analysis, staff erroneously stated that the HBRP’s peak construction activity represents about 10 percent of the North Coast Region’s workforce of 2,300; the statement should have referred to Humboldt County, not the North Coast Region. Staff recommends that this be corrected in the PMPD by inserting “2006 Humboldt County’s” and deleting “North Coast Region’s” in the third sentence of the first full paragraph.

Page 347, Item 6 – for clarification purposes, staff recommends inserting “property taxes and” before “sales taxes.”

Visual Resources

Page 376, last full paragraph – it appears that the ending citation should refer to page “4.5-16” not “4.15-16.” Additionally, because staff’s land use testimony in this area was based on staff’s testimony in the visual resources section, staff recommends that the citation be augmented to include reference to the visual resources testimony as follows: “see also pp. 4.12-24 to 4.12-25.”


II. Supplemental Testimony Analyzing PG&E’s Bioretention Area Submittal

Staff has reviewed the applicant’s bioretention area submittal and determined that this minor modification to the project does not change staff’s conclusion that, with the conditions of certification contained in the PMPD, the HBRP will comply with all applicable local, state, and federal laws, ordinances, regulations and standards and will not result in an unmitigated significant adverse environmental impact. Staff has determined that a discussion of the supplemental analysis is warranted in two areas – Biological Resources and Soil and Water Resources.

The remaining technical areas do not rise to the level of necessitating additional discussion; for these areas, staff herein provides declarations confirming that the minor project change does not change the conclusions they reached in their testimony.

DATED: September 9, 2008

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'L. Decarlo', written over a horizontal line.

LISA M. DECARLO
Senior Staff Counsel
California Energy Commission
1516 9th Street
Sacramento, CA 95817
(916) 654-5195
email: ldecarlo@energy.state.ca.us

BIOLOGICAL RESOURCES

Supplemental Testimony of Misa (Ward) Milliron

PROJECT CHANGE

The North Coast Regional Water Quality Control Board (NCRWQCB) has determined during consultations with the applicant regarding the Section 401 Water Quality Certification that the Humboldt Bay Repowering Project (HBRP) needs to add a low-impact design (LID) feature prior to discharging storm water to a treatment device. The applicant proposes the addition of an onsite bioretention area to be used as its primary storm water treatment system and satisfy the LID requirement along with graveled areas designed to ensure sufficient filtration of storm water.

The bioretention area would be approximately 4500 square feet (0.1 acre) and located on the east side of the project site, south of the liquid fuel tank containment area. The area would be excavated and filled with approximately 6 feet of improved soil consisting of sand (bottom), planting mixture (middle), and ground cover/mulch (top). A surrounding berm would create a shallow (6 inches deep) ponding area within the bioretention area.

This system in normal, low rainfall events would function to capture storm water in a sump and pump it into the bioretention area. During high rainfall events, excess storm water from the bioretention area would be routed to the storm water filtration system, which would serve as a secondary treatment system for the facility.

ANALYSIS

Staff reviewed the analysis in Pacific Gas and Electric Company's Bioretention Area Submittal dated August 13, 2008, and consulted agency and applicant representatives to determine whether this proposed project change would affect the conclusions or conditions of certification in staff's Final Staff Assessment. The applicant noted that the bioretention area, when ponded for several days, could attract water and shore birds and potentially result in collisions with existing transmission lines lacking swan flight diverters. To minimize potential bird collision impacts, the applicant proposed a new condition of certification to enclose the bioretention area in screens to prevent bird use.

Staff believes screening would be unnecessary considering the low level of collision risk associated with the nearby transmission line and availability of more suitable habitat surrounding the project. Buhne Slough is 200 feet southeast of the HBRP and provides better habitat for foraging and cover compared to the proposed bioretention area. Similarly, Humboldt Bay and the proposed wetland restoration/mitigation would provide more natural habitat and greater suitability for bird use. By comparison, the bioretention pond is not likely to represent a significant bird attractant because it would retain less water for a shorter period of time and would not likely support significant food sources for birds. In addition, because the nearest transmission line has been in place for many years, birds in the area have probably habituated to its presence and would not be

expected to collide with it even with the addition of the bioretention area. Although staff is unaware of a collision issue with the existing transmission line, staff would coordinate with the applicant on the monitoring included in the Biological Resources Monitoring Implementation and Mitigation Plan (Condition of Certification BIO-6) for the project. This may include incidental observations for a short period following construction and during operation of the bioretention area to assess whether unexpected impacts are occurring and implement remedial actions if necessary. Finally, the screen would consist of mesh, which could present a greater hazard to birds. For these reasons, staff recommends against installing screens at the bioretention area.

Although the bioretention area would be constructed on grassland that is considered wetland habitat by the California Coastal Commission, the applicant has already committed to mitigating for this area in the Wetland Mitigation (Condition of Certification BIO-12) because the area would have experienced impacts prior to this project change. Therefore, there would be no changes to staff's previous analysis of wetland impacts or mitigation.

CONCLUSIONS

Based on the above analysis of potential issues, staff concludes that this change to the HBRP would not cause significant impacts to biological resources nor would it change or necessitate additions to staff's previous conclusions or conditions of certification.

SOIL AND WATER RESOURCES

Supplemental Testimony of Ellen Townsend-Hough and John Kessler, P.E

PROJECT CHANGE

The North Coast Regional Water Quality Control Board (NCRWQCB) has determined during consultations with the applicant regarding the Section 401 Water Quality Certification that the Humboldt Bay Repowering Project (HBRP) needs to add a low-impact design (LID) feature to its stormwater system for the operational phase of the project. The LID feature would consist of an onsite bioretention area to be used as its primary storm water treatment system, capturing runoff from low flow rainfall events and the initial runoff from higher rainfall events. Runoff exceeding the capacity of the bioretention area would be filtered using a multimedia membrane system, and would discharge through a grass-lined bioswale before entering Buhne Slough.

The bioretention area would be approximately 4500 square feet (0.1 acre) and located on the east side of the project site, south of the liquid fuel tank containment area. The area would be excavated and filled with approximately 6 feet of improved soil consisting of 1.5 feet of sand (bottom), 4.5 feet of planting mixture (middle), and covered with 0.25 feet of ground cover/mulch (top). A surrounding berm would create a shallow (6 inches deep) ponding area within the bioretention area in addition to the subsurface capacity of the 6-foot deep layer of porous soils.

The stormwater system would function in normal, low rainfall events to capture storm water in a sump and pump it into the bioretention area. During high rainfall events, excess storm water from the bioretention area would be routed to the storm water filtration system, which would serve as a secondary treatment system for the facility.

ANALYSIS

Staff reviewed the analysis in Pacific Gas and Electric Company's Bioretention Area Submittal dated August 13, 2008 to determine whether this proposed project change would affect the conclusions or conditions of certification in staff's Final Staff Assessment. During operation of HBRP, stormwater surface runoff associated with HBRP would be separated into systems for draining contact areas where stormwater could be contaminated from hazardous materials, and from non-contact areas where stormwater from plant areas are not subject to contamination.

The applicant has not proposed any change to the system for draining stormwater from contact areas, which staff previously concluded would properly contain any hazardous material spills and would allow for removal of contaminants in any of the four water collection sumps that receive stormwater from the lubricating oil and diesel tank areas. The sump water would be checked for level and contamination and pumped to the oil water separator when the water is contaminated. Sludge would be removed by a licensed hazardous waste transporter and taken to a permitted recycling facility or hazardous waste disposal site. Non-contaminated sump water would be discharged to

the plant stormwater drainage system. Clean water from the oil water separator would be discharged to the sanitary sewer system.

The applicant's proposed Bioretention Area would modify the drainage system for stormwater from non-contact areas, areas which do not have equipment, tanks, or loading areas for storing or transferring oil or chemicals. The non-contact area stormwater drainage system would retain its original features of utilizing a series of catch basins for collecting stormwater and an underground piping system with manholes at all junction points and turns. The oil-water separator previously proposed would be replaced by the Bioretention Area and multi-media filter for overflow of the Bioretention Area. The mulch layer in the bioretention area would serve to filter contaminants, and provides an environment conducive to the growth of microorganisms, which degrade petroleum-based products and other organic materials. The mulch layer can be maintained by treating localized areas as needed, and entirely replaced over time which typically occurs at about two to three-year intervals. The removed mulch must be properly disposed depending on the presence of pollutants.

The onsite bioretention area would also be effective in removing pollutants when they are most likely to be present, capturing runoff from low flow rainfall events and the initial runoff from higher rainfall events. Both of these conditions would tend to generate stormwater that could contain traces of contaminants such as those associated with runoff over paved parking areas where an oil residue may be present from vehicle leakage. Runoff exceeding the capacity of the bioretention area would be filtered using a multimedia membrane system, and would discharge through a grass-lined bioswale before entering Buhne Slough. The stormwater drainage system discharge would be located to the southeast of the project, and the outfall structure would consist of a grass-lined swale that would serve to further remove potential contaminants before discharging into Buhne Slough.

The surface drainage system would still be designed to discharge the 10-year 24-hour storm runoff without flooding roads and the 50-year 24-hour storm runoff without flooding plant facilities. HBRP is not required to comply with typical stormwater drainage design criteria that would require post-developed stormwater discharge rates not to exceed pre-project stormwater discharge rates, because the greater portion of the 143-acre Humboldt Bay Power Plant site and surrounding properties in the King Salmon community are located within the 100-year flood plain. Humboldt County Public Works has advised staff that the area is so significantly affected by tidal influence that this typical criteria does not apply. The HBRP would be protected from flooding within the 100-year flood plain by raising the elevation of the site to range from 11 to 12 feet with equipment foundations set at an elevation of 13 feet, compared to the 100-year flood elevation of about 6 feet.

The project owner would still comply with the requirements of operational drainage plans and BMPs as specified in the Drainage, Erosion and Sediment Control Plan (DESCP) in accordance with Condition of Certification **Soil & Water-1**, and the General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of

Stormwater Associated with Industrial Activity in accordance with Condition of Certification **Soil & Water-3**. Staff would review and the CPM would approve the details of the applicant's proposal as would be included in the DESCP. Therefore, there are no changes to staff's previous analysis of stormwater impacts or mitigation included in the proposed conditions of certification.

CONCLUSIONS

Based on the above analysis of potential issues, staff concludes that the proposed modifications to the stormwater drainage and treatment system that would apply during the operational phase of the HBRP would not cause significant impacts to soil and water resources, nor does it change or necessitate additions to staff's previous conclusions or conditions of certification.

DECLARATION OF
J. Brewster Birdsall

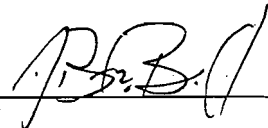
I, J. Brewster Birdsall, declare as follows:

1. I am presently under contract with Aspen Environmental Group to provide environmental technical assistance to the California Energy Commission. Under Contract No. 700-05-002, I am serving as an Air Quality Specialist and Project Manager to provide Peak Workload Support for the Energy Facility Siting Program and for the Energy Planning Program.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the final staff testimony on Air Quality for the Humboldt Bay Repowering Project Licensing Case Project based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: August 29, 2008

Signed: _____



At: San Francisco, California

DECLARATION OF
Misa (Ward) Milliron, Senior Biologist

I, Misa (Ward) Milliron, declare as follows:

1. I am presently employed by the California Energy Commission in the Environmental Office of the Energy Facilities Siting Division as a Planner II.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the Supplemental Biological Resources Testimony for the Humboldt Bay Replacement Project based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 9/2/08 Signed: Misa Milliron

At: Sacramento, California

DECLARATION OF
Beverly E. Bastian

I, **Beverly E. Bastian**, declare as follows:

1. I am presently employed by The California Energy Commission in the **Energy Facilities Siting Division** as a **Planner II**.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I prepared the staff testimony on **Cultural Resources**, for the Humboldt Bay Replacement Project based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issues addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: September 3, 2008 Signed: Beverly E. Bastian
At: Sacramento, California

DECLARATION OF Dal Hunter, Ph.D., C.E.G.

I, Dal Hunter, Ph.D., C.E.G., declare as follows:

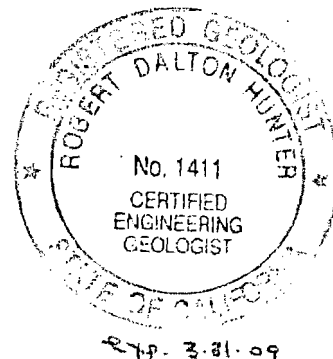
1. I am presently employed by Black Eagle Consulting, Inc. under contract with the California Energy Commission Energy Facilities Siting and Environmental Protection Division as an engineering geologist.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the staff testimony on **GEOLOGY AND PALEONTOLOGY** for the **Humboldt Bay Repowering Project (06-AFC-7)**, based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issues addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: September 2, 2008

Signed: _____

At: Black Eagle Consulting, Inc.
Reno, Nevada




DECLARATION OF

Steve Baker

I, Steve Baker, declare as follows:

1. I am presently employed by the California Energy Commission in the Engineering Office of the Energy Facilities Siting Division as a Senior Mechanical Engineer.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I prepared the staff testimony on **Power Plant Efficiency, Power Plant Reliability, and Noise and Vibration**, and supervised preparation of the staff testimony on **Facility Design and Geology and Paleontology**, for the Humboldt Bay Repowering Project based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issues addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: SEPT. 2 2008 Signed: 

At: Sacramento, California

DECLARATION OF Joseph Diamond Ph. D.

I, Joseph Diamond, declare as follows:

1. I am presently a Planner-II, economist, with the California Energy Commission.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I prepared the staff testimony on **Socioeconomics** for the Humboldt Bay Repowering Project based on my analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.
7. Please note a socioeconomics errata is that the Humboldt County labor market has 2,300 construction workers in 2006 not the North Coast Region.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 9/3/2008

Signed: _____

Joseph Diamond Ph. D.

At: Sacramento, California

DECLARATION OF John S. Kessler

I, John S. Kessler, declare as follows:

1. I am presently a consultant to the California Energy Commission for the Siting Office of the Energy Facilities Siting Division as a Project Manager.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I prepared the supplemental staff testimony on **Soil and Water Resources** for the Humboldt Bay Repowering Project based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project as indicated in my supplemental testimony does not change my analysis and previous testimony that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: September 9, 2008

Signed: _____

John S. Kessler

At: Sacramento, California

DECLARATION OF Ellen Townsend-Hough

I, **Ellen Townsend-Hough** declare as follows:

1. I am presently employed by the California Energy Commission in the Environmental Siting Office of the Energy Facilities Siting Division as an Associate Mechanical Engineer.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the staff testimony on Soils and Water Resources for the Humboldt Bay Repowering Project (HBRP) based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's bioretention Area submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: September 3, 08

Signed: Ellen Townsend-Hough

At: Sacramento, California

DECLARATION OF
JASON RICKS

I, Jason Ricks, declare as follows:

1. I am presently a consultant to the California Energy Commission for the Siting Office of the Energy Facilities Siting Division as a Traffic and Transportation Specialist.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the **Traffic and Transportation** section for the Humboldt Bay Repowering Project Final Staff Assessment based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 9-4-08

Signed: 

At: Agoura Hills, California


DECLARATION OF AJOY GUHA

I, **Ajoy Guha**, declare as follows:

1. I am presently employed by the California Energy Commission in the **Transmission System Engineering unit** of the Energy Facilities Siting Division as an Associate Electrical Engineer.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the staff testimony on **Transmission System Engineering**, for the **Humboldt Bay Repowering Project** based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my analysis and previous testimony that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 9-9-08

Signed: 

At: Sacramento, California

DECLARATION OF

Mark R. Hamblin

I, **Mark R. Hamblin** declare as follows:

I am presently employed by the California Energy Commission in the Environmental Protection Office of the Energy Facilities Siting Division as a Planner II.

A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.

I prepared the staff testimony for the Visual Resources section for the proposed Humboldt Bay Repowering Project based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.

It is my professional opinion that the prepared testimony is valid and accurate with respect to the issues addressed therein.

I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: Sept. 2, 2008

Signed: Mark R. Hamblin

At:

Sacramento, California

**DECLARATION OF
SHAHAB KHOSHMAHRAB**

I, **SHAHAB KHOSHMAHRAB**, declare as follows:

1. I am presently employed by the California Energy Commission in the **ENGINEERING OFFICE** of the Facilities Siting Division as a **MECHANICAL ENGINEER**.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I participated in the preparation of the staff testimony on **Facility Design** for the **Humboldt Bay Repowering Project** based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issues addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my conclusions that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: September 2, 2008

Signed: 

At: Sacramento, California

DECLARATION OF

Alvin J. Greenberg, Ph.D.

I, **Alvin J. Greenberg, Ph.D.** declare as follows:

1. I am presently a consultant to the California Energy Commission, Energy Facilities Siting and Environmental Protection Division.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the staff testimony on the **Public Health, Hazardous Materials Management, Waste Management, and Worker Safety/Fire Protection** sections for the **Humboldt Bay Repowering Project** based on my independent analysis of the amendment petition, supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.
6. I have read and reviewed Pacific Gas and Electric Company's Bioretention Area Submittal, filed on August 13, 2008, and conclude that this change to the project does not change my analysis and previous testimony that, with the conditions of certification incorporated into the Presiding Member's Proposed Decision, the Humboldt Bay Repowering Project would comply with all applicable laws, ordinances, standards, and regulations and would not result in a significant adverse environmental impact.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated:

Sept. 9, 2008

Signed:

Alvin J. Greenberg

At:

Sacramento, California